

AMENDMENTS TO THE CLAIMS:

The listing of claims provided below will replace all prior versions, and listings, of claims in the application.

Listing of claims

- 1-5. (Canceled)
6. (Currently amended) A method for producing poly-beta-hydroxybutyrate, said method comprising:
 - (i) isolating a nucleic acid encoding the proteins responsible for a poly-beta-hydroxybutyrate biosynthetic pathway from *Streptomyces aureofaciens* NRRL2209, wherein the nucleic acid comprises SEQ ID NO:1,
 - (ii) cloning said nucleic acid into a plasmid vector to obtain a recombinant vector,
 - (iii) transforming *Escherichia coli* JM109 with said recombinant vector to obtain recombinant *Escherichia coli* JM109 bearing accession No. PTA1579 which expresses poly-beta-hydroxybutyrate,
 - (iv) culturing said recombinant *Escherichia coli* JM109 in a conventional medium comprising glycerol and one or more substrates and
 - (v) recovering said poly-beta-hydroxybutyrate from said recombinant *Escherichia coli* JM109.
7. (Previously presented) The method according to claim 6 wherein the nucleic acid encoding the poly-beta-hydroxybutyrate biosynthetic pathway is a 4.826 Kb fragment.
8. (Canceled)

9. (Previously presented) The method according to claim 6 wherein the plasmid vector is a multicopy plasmid vector.
10. (Previously presented) The method according to claim 6 wherein the recombinant vector is pSa240.
11. (Currently amended) The method according to claim 10 wherein the *Escherichia coli* JM109 is transformed at a temperature in the range of 14-18C in the presence of T4 DNA ligase enzyme.
12. (Canceled)
13. (Currently amended) The method according to claim 6 wherein the recombinant *Escherichia coli* JM109 produces poly-beta-hydroxybutyrate in recoverable quantities of at least about 60% (w/w) of the recombinant *E. coli* JM109 dry cell mass.
14. (Canceled)
15. (Previously presented) The method according to claim 9, wherein the multicopy plasmid vector is pGEM-3Z.